

**REMARKS**

An Amendment filed November 13, 2006 in response to the Final Office Action was not entered by Examiner as raising new issues that would require further consideration and or search.

This Preliminary Amendment, submitted for filing with an RCE being filed concurrently herewith, is responsive to the Final Office Action mailed July 12, 2006, and the Advisory Action mailed December 7, 2006, and replaces the Amendment filed November 13, 2006.

In accordance with the foregoing, claims 1, 45, and 67 are amended. No new matter is presented in any of the foregoing and, accordingly, approval and entry of the amended claims are respectfully requested.

Claims 1-22 and 45-67 are pending and under consideration. Reconsideration is respectfully requested.

This Preliminary Amendment includes those amendments to claims 1, 45, and 67 from the Amendment filed November 13, 2006 that was not entered by the Examiner as requiring further search and raising new issues. Accordingly, if the claims are not found allowable Applicant submits that issuing of a first Office Action that is a final first Office Action would not be appropriate.

**Foreign Priority Perfected**

In addition a copy of the English translation of Japanese application no. 2001-084836 ('836) and a statement that the translation of the certified copy is accurate are filed perfecting the priority of the certified foreign language copy of '836 filed with the USPTO on December 28, 2001 in accordance with 37 CFR 1.55.

Applicant brings to the attention of the Examiner that with the perfection of foreign priority, Ejerhed (U.S.P. 7,058,564) is no longer available as a reference in support of a §102/103 rejection.

Applicant points out to the Examiner that the previous Office Action conceded that features of each of the independent claims were not taught by a combination previously cited art without the teachings of Ejerhed.

**Interview Requested**

Applicant also requests that if the Examiner does not immediately consider the case in a condition for allowance that an interview be granted to resolve any remaining items.

**Item 3: Rejection of claims 1-22 and 45-67 under 35 U.S.C. §112, second paragraph, as being indefinite**

In item 3 of the Office Action, the Examiner rejects claims 1-22 and 45-67 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner asserts:

claims 1, 45, and 67 recite the limitation "extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence in a case said search request sentence does not include an interrogative pronoun or extracting a component ... In a case said search request sentence includes the interrogative pronoun" in para. 5 of the claims. The claims then go on to recite generating search criteria, searching the database and outputting the search results based on the topic of query extracted. It is unclear as to whether or not the topic of query is extracted only when the search request sentence includes the interrogative pronoun, in which case, all the limitations following that in para. 5 are not required when the search request sentence does include an interrogative pronoun.

(Action at pages 2-3).

Claims 1, 45, and 67, as amended herein recite, using claim 1 as an example, "extracting, as a topic of query, either a top level component of syntactic hierarchy of said search request sentence, in a case said search request sentence does not include an interrogative pronoun, or a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun." Such an extracting is illustrated, for example, in FIG. 7.

**Summary**

Applicants submit that claims 1-22 and 45-67 comply with 35 U.S.C. §112, second paragraph and request the rejection be withdrawn.

**Item 4: Rejection of independent claims 1, 45, and 67 under 35 U.S.C. §103(a) as being unpatentable over Bessho et al. (U.S.P 6,243,670) and in view of Ejerhed (U.S.P. 7,058,564)**

**Items 4-9: Rejection of dependent claims 2-22 and 44-66 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of combinations of art Ejerhed, Ferrel et al. (U.S.P. 5,907,837), Rose (U.S.P. 5,752,244), Henkin et al. (U.S. Pub. 2002/0107735 A1), and Schultz (U.S.P. 5,640,553)**

In item 4 of the Office Action, the Examiner rejects independent claims 1, 45, and 67 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of Ejerhed, and in items 4-9 rejects dependent claims 2-22 and 44-66 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of combinations of Ejerhed, Ferrel, Rose, Henkin et al., and Schultz. The rejections are traversed.

The Examiner concedes Bessho does not teach:

determining whether said search request sentence includes an interrogative

pronoun and extracting a component qualified by an interrogative pronoun in a case said search request sentence includes the interrogative pronoun.

(Action at page 4).

However, the Examiner further asserts:

the following claimed limitations are not required by the amended independent claim as they stem from a situation where the search request sentence does not include the interrogative pronoun, i.e. the extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence in a case said search request sentence does not include an interrogative pronoun; generating search criteria based on said topic of query extracted. . . ; searching said database using said generated search criteria . . . ; determining an output format of search results based on said topic of the query . . . ; and outputting . . . Since Ejerhed (as stated below) discloses the situation where the search request sentence does include an interrogative pronoun, the aforesaid claim limitations are not addressed.

(Action at page 4).

In support of the rejection, the Examiner relies on Ejerhed for teaching features of "determining whether a search request sentence includes an interrogative pronoun and extracting a component qualified by an interrogative pronoun in a case said search request sentence includes the interrogative pronoun" and contends it would have been obvious:

to modify Bessho with the teachings of Ejerhed to include determining whether a search request sentence includes an interrogative pronoun and extracting a component qualified by an interrogative pronoun. . . . for the purpose of automatically finding answers to a natural language question.

(Action at page 5).

## Traverse Of Rejections

### I. Ejerhed not available as a reference in support of the §103(a) rejection

The perfected foreign priority of the present invention is March 23, 2001 based on Japanese Patent Application No. 2001-084839 (the certified translation filed herein).

Ejerhed is only available as a reference in support of a 35 U.S.C. §103(a) rejection as of its filing date of April 3, 2001 that is after the perfected foreign priority date of the present invention.

As provided in MPEP §2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

Since the Action concedes that Bessho does not teach all features recited by each of the independent claims, the rejection should be withdrawn and claims 1-22 and 45-67 allowed.

**II. Features recited by claims 1-22 and 45-67 not obvious in even *arguendo* modification**

Applicants submit that even an *arguendo* combination of the cited art Ejerhard does not teach features recited by independent claims 1, 45, and 67 (and respective dependent claims).

Independent claim 1, as amended herein, recites a query-and-response processing method for receiving a search request concerning a query input by a user and searching a database to present search results to the user including:

(1) "analyzing a search request sentence provided by said user using syntactic parsing;" and further

(2) "analyzing an intention of the query based on the analyzed search request sentence," and wherein the analyzing comprises:

(2a) "determining whether said search request sentence includes an interrogative pronoun," and

(2b) "extracting, as a topic of query, either a top level component of syntactic hierarchy of said search request sentence, in a case said search request sentence does not include an interrogative pronoun, or a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun;" and further

(3) generating search criteria based on said topic of query extracted in said analyzing the intention of query;" and further

(4) "searching said database using said generated search criteria and retrieving, as search results, information that are intended for said topic of query;" and further

(5) "determining an output format of search results based on said topic of the query without further input by the user;" and further

(6) "outputting said search results that are selected items to be presented to the user." (emphasis added).

Independent claims 45 and 67, as amended herein, have similar recitations.

Applicants submit that even an *arguendo* modification of Bessho does not teach the recited cases of:

"extracting, as a topic of query, a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative

pronoun" and further "generating search criteria based on said topic of query" (i.e., the component qualified by an interrogative pronoun) and further "searching said database using said generated search criteria and retrieving, as search results, information that are intended for said topic of query" (i.e., the component qualified by an interrogative pronoun); and further "determining an output format of search results based on said topic of the query (i.e., the component qualified by an interrogative pronoun) without further input by the user."

Applicants submits the Examiner appears to contend independent claims 1, 45, and 67 (before the amendment herein) either:

- 1) in a case a search request sentence does not include an interrogative pronoun then "extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence" and further "generating search criteria based on said topic of query . . . searching said database using said generated search criteria . . . determining an output format of search results based on said topic of the query . . . and outputting said search results;" or
- 2) in a case a search request sentence includes the interrogative pronoun "extracting a component qualified by an interrogative pronoun" with no further action.

That is, Applicants submit that the Examiner's support for the rejection of independent claims 1, 45, and 67 was based by merely modifying Bessho to also teach extracting a component qualified by an interrogative pronoun without any further operations regarding the topic of query.

However, even an *arguendo* modification of Bessho does not teach features recited by independent claims 1, 45, and 67, all as amended herein, of further generating search criteria based on said topic of query where the component is qualified by an interrogative pronoun.

### **Summary**

Since features recited by independent claims 1, 45, and 67 (and respective dependent claims) are not taught by the cited art available in support of the rejection and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 1-22 and 45-67 allowed.

### **CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Preliminary Amendment,  
please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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